

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously presented) A conversion LED, comprising:

one LED for emitting a primary radiation, the LED comprising a semiconductor material selected from the group consisting of GaInN, GaN, and a combination thereof; and

one luminescence conversion body for converting the primary radiation into a secondary radiation,

wherein the luminescence conversion body is a polycrystalline ceramic body sintered together from individual base crystallites that are formed by a base material that is doped by a dopant such that the polycrystalline ceramic body acts partly or completely as luminescent material by virtue of at least part of the base material being activated by said dopant,

wherein the ceramic body has a ceramic density of above 90-so that the ceramic body is translucent to both the primary radiation and the secondary radiation.

Claims 2-24. (Canceled).

25. (Previously presented) A conversion LED, comprising:

one LED for emitting a primary radiation, the LED comprising a semiconductor material selected from the group consisting of GaInN, GaN, and a combination thereof; and

one luminescence conversion body for converting the primary radiation into a secondary radiation,

wherein the luminescence conversion body is a polycrystalline ceramic body sintered together from individual base crystallites that are formed by a base material that is doped by a dopant such that the polycrystalline ceramic body acts partly or completely as luminescent material by virtue of at least part of the base material being activated by said dopant,

wherein the ceramic body has a ceramic density of above 90% so that the ceramic body is translucent to both the primary radiation and the secondary radiation,

wherein the ceramic body comprises at least one optical element for influencing a beam path of the primary radiation and a beam path of the secondary radiation, and

wherein the optical element is disposed at one surface section of the ceramic body, said surface section being formed as a lens.

26. (Previously presented) A conversion LED, comprising:

one LED for emitting a primary radiation, the LED comprising a semiconductor material selected from the group consisting of GaInN, GaN, and a combination thereof; and

one luminescence conversion body for converting the primary radiation into a secondary radiation,

wherein the luminescence conversion body is a polycrystalline ceramic body sintered together from individual base crystallites that are formed by a base material that is doped by a such that the polycrystalline ceramic body acts partly or completely as luminescent material by virtue of at least part of the base material being activated by said dopant,

wherein the ceramic body has a ceramic density of above 90% so that the ceramic body is translucent to both the primary radiation and the secondary radiation,

wherein the ceramic body comprises at least one optical element for influencing a beam path of the primary radiation and a beam path of the secondary radiation, said optical element being formed from a plurality of scattering centers, the scattering centers comprising impurity crystallites selected from the group consisting of aluminum oxide, titanium oxide, yttrium aluminum garnet (YAG), yttrium oxide, and combinations thereof within the ceramic body.

27. (Previously presented) The conversion LED as claimed in claim 26, wherein the scattering centers are disposed at one surface section of the ceramic body.

28. (Previously presented) The conversion LED as claimed in claim 26, wherein the impurity crystallites comprise yttrium oxide and the base crystallites comprise YAG.

29. (Previously presented) The conversion LED as claimed in claim 28, wherein the luminescent material comprises a cerium-doped yttrium aluminum garnet.

30. (Currently amended) ~~The conversion LED as claimed in claim 26,~~ A conversion LED, comprising:

one LED for emitting a primary radiation, the LED comprising a semiconductor material selected from the group consisting of GaInN, GaN, and a combination thereof; and

one luminescence conversion body for converting the primary radiation into a secondary radiation,

wherein the luminescence conversion body is a polycrystalline ceramic body sintered together from individual base crystallites that are formed by a base material that is doped by a

such that the polycrystalline ceramic body acts partly or completely as luminescent material by virtue of at least part of the base material being activated by said dopant,

wherein the ceramic body has a ceramic density of above 90% so that the ceramic body is translucent to both the primary radiation and the secondary radiation,

wherein the ceramic body comprises at least one optical element for influencing a beam path of the primary radiation and a beam path of the secondary radiation, said optical element being formed from a plurality of scattering centers, the scattering centers comprising impurity crystallites selected from the group consisting of aluminum oxide, titanium oxide, yttrium aluminum garnet (YAG), yttrium oxide, and combinations thereof within the ceramic body, and
wherein one or more zones of the ceramic body have a high concentration of impurity crystallites.

31. (Previously presented) A conversion LED, comprising:

one LED for emitting a primary radiation, the LED comprising a semiconductor material selected from the group consisting of GaInN, GaN, and a combination thereof; and

one luminescence conversion body for converting the primary radiation into a secondary radiation,

wherein the luminescence conversion body is a polycrystalline ceramic body sintered together from individual base crystallites that are formed by a base material that is doped by a dopant such that the polycrystalline ceramic body acts partly or completely as luminescent material by virtue of at least part of the base material being activated by said dopant,

wherein the ceramic body has a ceramic density of above 90% so that the ceramic body is translucent to both the primary radiation and the secondary radiation,

wherein the ceramic body comprises a carrier, which only includes base crystallites, and a layer, which is activated by a dopant.

32. (Previously presented) The conversion LED as claimed in claim 31, wherein the layer has a thickness of a few millimeters.

33. (Previously presented) The conversion LED as claimed in claim 31, wherein the base crystallites are YAG and the dopant is Ce.

34. (Previously presented) The conversion LED as claimed in claim 31, wherein the layer is located on a front side of the ceramic body and the dopant is distributed inhomogeneously within the base material by a decrease of the dopant concentration towards the interior.

35. (Previously presented) A conversion LED, comprising:
at least one LED for emitting a primary radiation; and
at least one luminescence conversion body for converting the primary radiation into a secondary radiation,

wherein the luminescence conversion body is a ceramic body sintered together from individual base crystallites that are formed by a base material that is doped by a dopant such that the polycrystalline ceramic body acts partly as luminescent material by virtue of at least part of the base material being activated by the dopant, and

wherein the LED and the luminescence conversion body are an integral body, the integral body comprises one or two arms and a stub, with at least one arm serving as a radiation generator for the LED and the stub providing a doped layer which is activated by the dopant, and the primary radiation is guided into the stub.

36. (New) The conversion LED as claimed in claim 26, wherein the scattering centers are disposed at one surface section of the ceramic body.

37. (New) The conversion LED as claimed in claim 30, wherein the impurity crystallites comprise yttrium oxide and the base crystallites comprise YAG.

38. (New) The conversion LED as claimed in claim 30, wherein the luminescent material comprises a cerium-doped yttrium aluminum garnet.